



ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

Ron Fuller, Chief Electrical Inspector

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● Annual Electrical Stakeholder Meetings Are Scheduled

The electrical stakeholders meetings provide an opportunity to interact with inspectors, supervisors, and central office staff. The agenda for the meeting will include: a fraud prevention presentation, Department of Occupational Safety and Health (DOSH-formerly WISHA) presentation on workplace safety, and an update on the Electrical Program activities from regional and central office staff. The meeting will also include time for you to ask questions of the presenters. Meetings will be held from **6:00 PM - 9:00 PM** at the following locations:

SEPTEMBER

14th, Tumwater, L&I office, 7273 Linderson Way, Auditorium

20th, Tukwila, L&I office, 12806 Gateway Dr

27th, White Salmon, Community Library Room , #5 Town & Country Square

OCTOBER

5th, Longview, Cowlitz PUD, 961 12th Ave.

10th, Everett, Snohomish PUD, 2320 California St.

11th, Mount Vernon, Cotton Tree Convention Center, 2300 Market St.

18th, Spokane, Spokane Falls Community College, Student Union Building, 3410 W. Fort George Dr.

19th, Pullman, Pullman City Hall, 325 SE Paradise

25th, Kennewick, Benton County PUD, 2721 West 10th

26th, Yakima, Pacific Power, 500 North Keys Road

NOVEMBER

1st, Moses Lake, L&I office, 3001 West Broadway

8th, Lakewood, Lakewood Library, 6300 Wildaire Rd SW

15th, Bremerton, Oyster Bay Conference Room, 100 Oyster Bay Ave.

● WAC Public Hearings

A public hearing will be held at the L&I building, 7273 Linderson Way SW, in Tumwater at 10:00 AM on October 12, 2006, to take public testimony for proposed electrical Washington Administrative Code (Chapter 296-46B) changes scheduled to be effective December 31, 2006. Some of the revisions include incorporating:

- New laws pertaining to the domestic well industry,
- Classroom education requirements for trainees,
- Relocation of several WAC sections to allow for easier adoption by city jurisdictions,
- Fee decrease for permits and licensing, and
- Other technical and administrative changes.

● Domestic Well Outreach

SSB 6225, passed in the 2006 legislative session, provides companies and workers in the pump and well industry with simplified licensing processes and opportunities to grandfather experience towards worker and administrator certification. The legislation also significantly changes the licensing requirements for performing the plumbing work necessary in specific domestic, public and farm-owned drinking and irrigation water systems. L&I began an outreach effort to the industry September 1, 2006.

L&I encourages all contractors and workers in the industry to make themselves aware of the changes in the industry and to take advantage of their grandfathering opportunities. Until December 31, 2006, there is an opportunity to grandfather previous work experience towards certification as an electrical administrator and as a specialty electrician and specialty plumber without examination. Roger Chick has been hired to assist with the outreach effort during the implementation period of the passed legislation, SSB 6225. For more information, you can contact Roger Chick at 360-292-5825 or email him at:

<mailto:chir235@lni.wa.gov>

Applications are available on our website at: <http://www.lni.wa.gov/TradesLicensing/Electrical/FormPub/>.

● Description Of Work On Class B Labels

Class B labels have been received by L&I that contain very broad descriptions of work performed. Examples are "low voltage", "added one receptacle" or "replaced 15 hp motor". An inspection cannot be performed if the work and location are not clearly described on the returned Class B labels. The contractor must provide enough information on the label to identify the work. Help the department make the most of your and the inspector's time by clearly identifying the work.

● GFCI Protection For Laundry Receptacles

If you are unable to maintain a 6-foot separation between the laundry equipment outlet and adjacent laundry or utility sinks, as required in NEC 210.8(A)(7), L&I will allow a single receptacle for one appliance to be installed without ground fault circuit protection. This interpretation follows the guidelines found in NEC 210.8(A)(2), exception 2) for similar installations located in a garage. If you install a duplex receptacle within 6' of an adjacent laundry or utility sink, then that receptacle must be GFCI protected.

● NEC Article 680 Swimming Pools, Fountains, And Similar installations

Does the wiring method from the panel board to the hot tub or spa have to contain a copper equipment grounding conductor that is not smaller than 12 AWG?

NEC 680.42(C) is unclear on this issue. The NEC says, *"In the interior of a one-family dwelling or in the interior of another building or structure associated with a one-family dwelling, any of the wiring methods recognized in Chapter 3 of this Code that contain a copper equipment grounding conductor that is insulated or enclosed within the outer sheath of the wiring method and not smaller than 12 AWG shall be permitted to be used for the connection to motor, heating, and control loads that are part of a self-contained spa or hot tub or a packaged spa or hot tub equipment assembly."*

The code is written in a permissive instead of the normal prescriptive manner. Research of past NFPA proposals on this section indicates that the requirement for a copper equipment grounding conductor applies only to the final connection from the maintenance disconnect to the connection at the hot tub or spa equipment. A wiring method that meets the requirements of the installation and contains an aluminum or copper equipment grounding conductor will be allowed from the service to the line side of the maintenance disconnect.

A maintenance disconnect is required in NEC 680.12 which says, *"One or more means to disconnect all ungrounded conductors shall be provided for all utilization equipment other than lighting. Each means shall be readily accessible and within sight from its equipment."*

In addition, WAC 296-46B-680(3) requires that *"The maintenance disconnect and field installed listed electrical equipment for a hot tub, spa, or swim spa must be located at least five feet from the hot tub, spa, or swim spa."*

● Electrical Question of the Month

This Month's Question: No overcurrent device shall be connected in series with any conductor that is intentionally grounded, unless:

- A) The overcurrent device is part of a selectively coordinated distribution system.
- B) Where the grounded conductor is part of an electrical service, and is attached to a made electrode.
- C) The overcurrent device opens all conductors of the circuit, including the grounded conductor, and is designed so that no pole can operate independently.
- D) None of the above. This is never allowed.

Last Month's Question: An enclosed luminaire located within ____ feet of the waterline of a bathtub must be ground fault circuit interrupter protected? A) 3, B) 4, C) 5, D) 6. The answer is: C) [WAC 296-46B-410].